

Empowering Marine Knowledge through Hydrographic Professional Programmes at Universiti Teknologi Malaysia

Prof. Sr Dr. Mohd Razali Mahmud
Commission Chair, FIG Commission 4
(Hydrography)

18 & 19 November 2019



UTM
UNIVERSITI TEKNOLOGI MALAYSIA



Empowering Marine Knowledge through Hydrographic Professional Programmes at Universiti Teknologi Malaysia

DR. MOHD RAZALI MAHMUD
Professor of Hydrography
Chair of FIG Commission 4

Professional Training of Hydrographic Surveyors at UTM


UTM
 UNIVERSITI TEKNOLOGI MALAYSIA

UTM HYDROGRAPHIC SURVEYING PROGRAMMES

Organised by:

 Centre for Hydrographic Studies (CHS)
 Faculty of Built Environment and Surveying

UTM Hydrographic Surveying I Programme (UTM HYDRO I) FIG/HO/ICA Category B



Aim of the Programme

- To produce Hydrographic Surveyors that fulfil the Standards of Competence according to the S-5B Standards of the International Hydrographic Organisation.

Entry Requirement

- Diploma in Land Surveying / Geomatics Engineering / Civil Engineering / Computer Science / Naval Science or other related fields, OR
- Three (3) years working experience in hydrographic surveying field (to nominate at least one (1) professional reference)

UTM Hydrographic Surveying II Programme (UTM HYDRO II) FIG/HO/ICA Category A



Aim of the Programme

- To produce Hydrographic Surveyors that fulfil the Standards of Competence according to the S-5A Standards of the International Hydrographic Organisation.

Entry Requirement

- Degree in Land Surveying / Geomatics Engineering / Civil Engineering / Computer Science / Naval Science or other related fields, OR
- Fully accredited Category B (FIG/HO/ICA) certificate.

Hydrography and Marine Technology Programme (UTM HYDRO III) FIG/HO/ICA Category A



Aim of the Programme

- To train and expose a hydrographic surveyor towards the development and market demand within the mapping and marine industry according to the S-5A Standards of the International Hydrographic Organisation.

Entry Requirement

- Degree in Land Surveying or Geomatics Engineering, AND
- Registered with the respective Land Surveyors Board Malaysia (LJTB), The Association of Consulting Licensed Land Surveyors (AICLS) and Sabah Surveyors Board (SASJ/TA)

Marine Geospatial and Cartography Programme FIG/HO/ICA Category B



Aim of the Programme

- To cater for professionals who are competence, creative and innovative as marine geospatial and cartographers according to the S-5B Standards of the International Hydrographic Organisation.

Entry Requirement

- Diploma in Land Surveying / Geomatics Engineering / Geoinformatics / Civil Engineering / Marine Technology / Computer Programming or other related fields.

UTM Hydrographic Surveying Programme Activities



For further details, please contact us:

 Programme Manager
 UTM HYDRO I
 Sr Dr. Amr Hassan Md Din
 +6013-7975476 | amrhasan@utm.my

 Programme Manager
 UTM HYDRO II & UTM HYDRO III
 Sr Dr. Khairulnizam M. Idris
 +6019-7803036 | khairulnizam@utm.my

 Programme Manager
 Marine Geospatial and Cartography
 Sr Dr. Mohd Fard Mohd Aniff
 +6011-12234055 | mofardna@utm.my

www.utm.my

innovative • entrepreneurial • global

- The only academic institution in the country currently focusing her effort towards the development of hydrographic surveying.
- Objective: to provide facilities for education and training to hydrographic surveyors to cater for the increasing need of the country.
- Supported by the National Hydrographic Centre RMN and recognized by the National Hydrographic Committee.

THE RATIONALE OF CATEGORY A PROGRAMME

PROFESSIONAL TRAINING AND EDUCATION



**CONTINUES LEARNING AND
CURRENT DEVELOPMENT**

NATIONAL HYDROGRAPHIC ACT

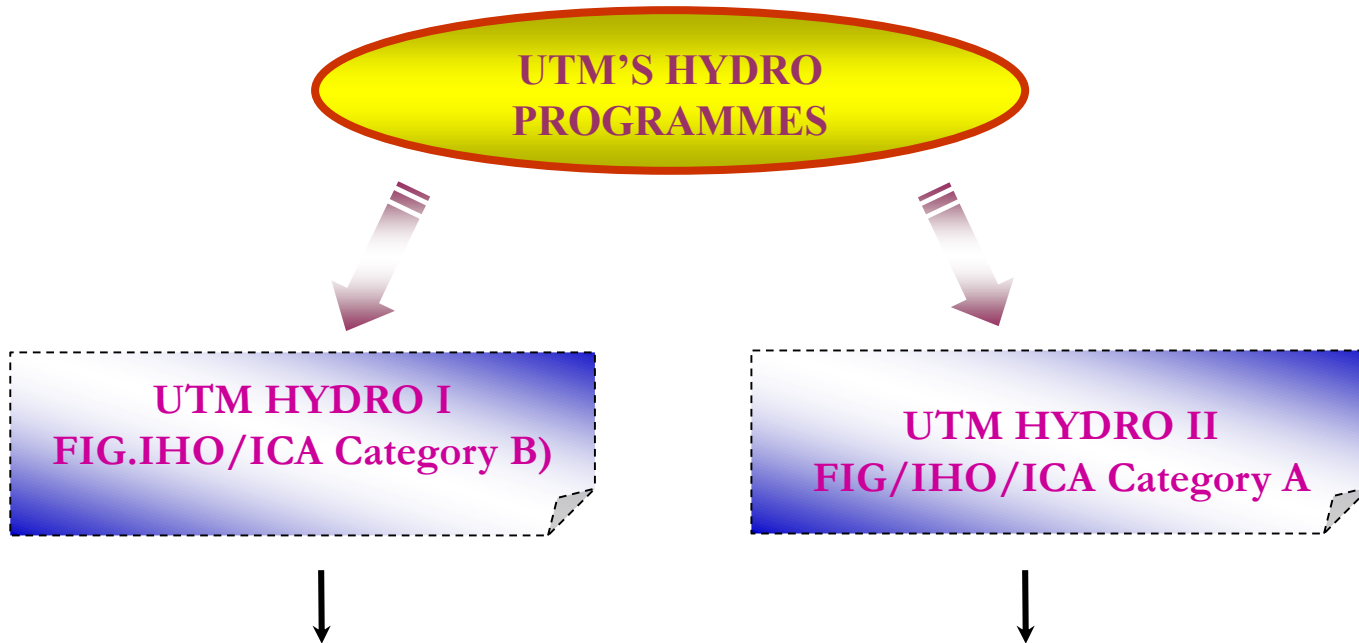


**FULLFILLING THE NATIONAL
HYDROGRAPHIC ACT
(WAY FORWARD)
REQUIREMENT**

CONSULTANT AND REFERENCES



**CONSULTANT/REFERENCES IN
LAND SURVEY AND
HYDROGRAPHIC SURVEY
ACTIVITIES**



INTRODUCTION

Four (4) recognised programmes internationally at the Faculty of Built Environment and Surveying, Unversiti Teknologi Malaysia :.

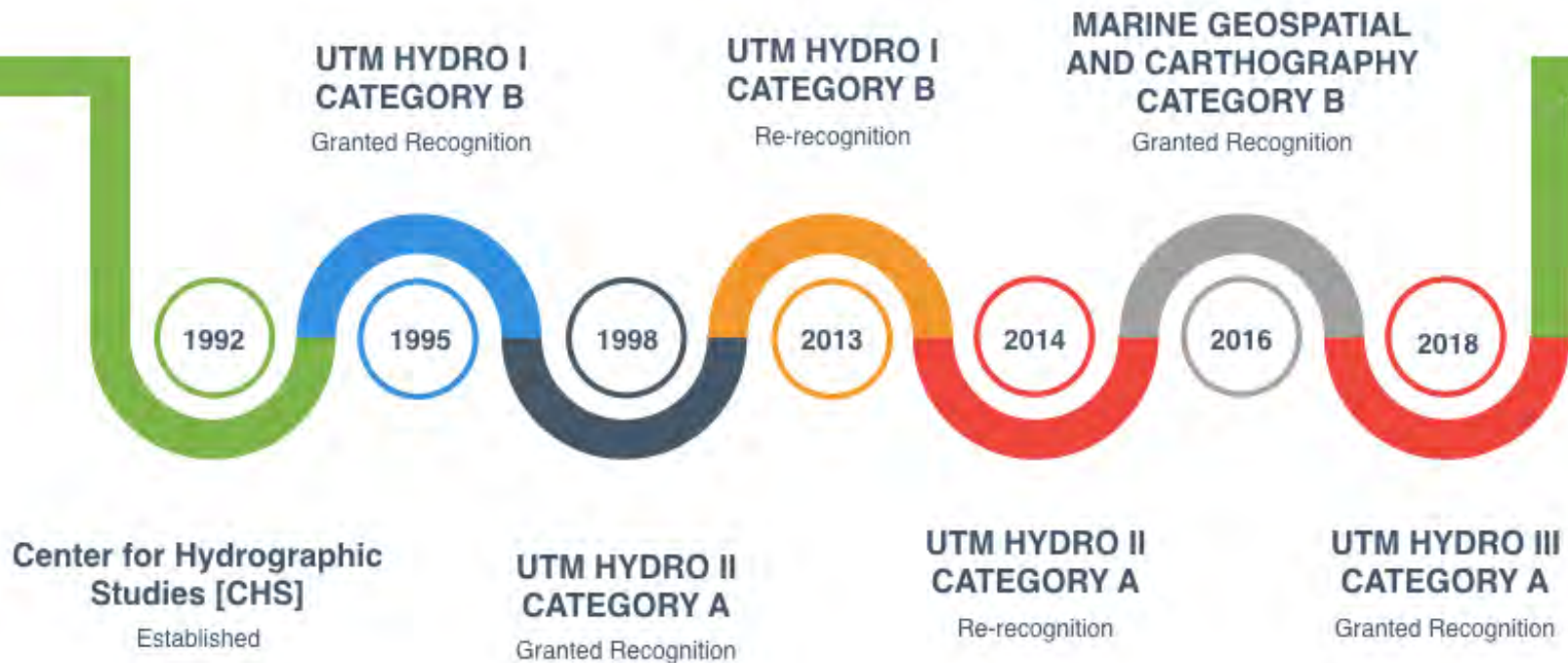
FIG/IHO/ICA CATEGORY B - UTM HYDRO I

FIG/IHO/ICA CATEGORY A - UTM HYDRO II

FIG/IHO/ICA CATEGORY A - UTM HYDRO III

FIG/IHO/ICA CATEGORY B - UTM CARTO I

OUR HISTORY



RECOGNISED BY



MALAYSIA-CANADA HYDROGRAPHIC TRAINING PROJECT

Committee Members

Hydrographic Directorate, Royal Malaysian Navy (RMN)
Department of Survey and Mapping Malaysia (DSMM)
Institution of Surveyors Malaysia (ISM)
Canadian Hydrographic Association (CHS)
Universiti Teknologi Malaysia (UTM)

MALAYSIA-CANADA HYDROGRAPHIC TRAINING PROJECT

**Project funded by the
Canadian International Development Agency (CIDA)
with support from the
Canadian Hydrographic Service (CHS)**

up to 2001

FIG/IHO/ICA UTM HYDRO II GRADUATION 2001



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MALAYSIA-CANADA HYDROGRAPHIC TRAINING PROJECT

Hydrographic Training

HYDRO I

HYDRO II

MALAYSIA-CANADA HYDROGRAPHIC TRAINING PROJECT

Hydrographic Training

HYDRO I - 1989

HYDRO II - 1992

MALAYSIA-CANADA HYDROGRAPHIC TRAINING PROJECT

Hydrographic Training

HYDRO I - 1989

HYDRO II - 1992

MALAYSIA-CANADA HYDROGRAPHIC TRAINING PROJECT

Professional Hydrographic Training

FIG/IHO HYDRO I - 1995

FIG/IHO HYDRO II - 1998

UNIVERSITI TEKNOLOGI MALAYSIA

Professional Hydrographic Training

FIG/IHO/ICA UTM HYDRO I – 2006

1st renewal

FIG/IHO/ICA UTM HYDRO II – 2008

1st renewal

UNIVERSITI TEKNOLOGI MALAYSIA

Professional Hydrographic Training

FIG/IHO/ICA UTM HYDRO I – 2013

2nd renewal

FIG/IHO/ICA UTM HYDRO II – 2014

2nd renewal

UNIVERSITI TEKNOLOGI MALAYSIA

Professional Hydrographic Training

FIG/IHO/ICA UTM HYDRO I

3rd renewal - 2019

FIG/IHO/ICA UTM HYDRO II

Due for 3rd renewal - 2020

**UNIVERSITI TEKNOLOGI MALAYSIA
&
NATIONAL HYDROGRAPHIC CENTRE**

Professional Cartographic Training

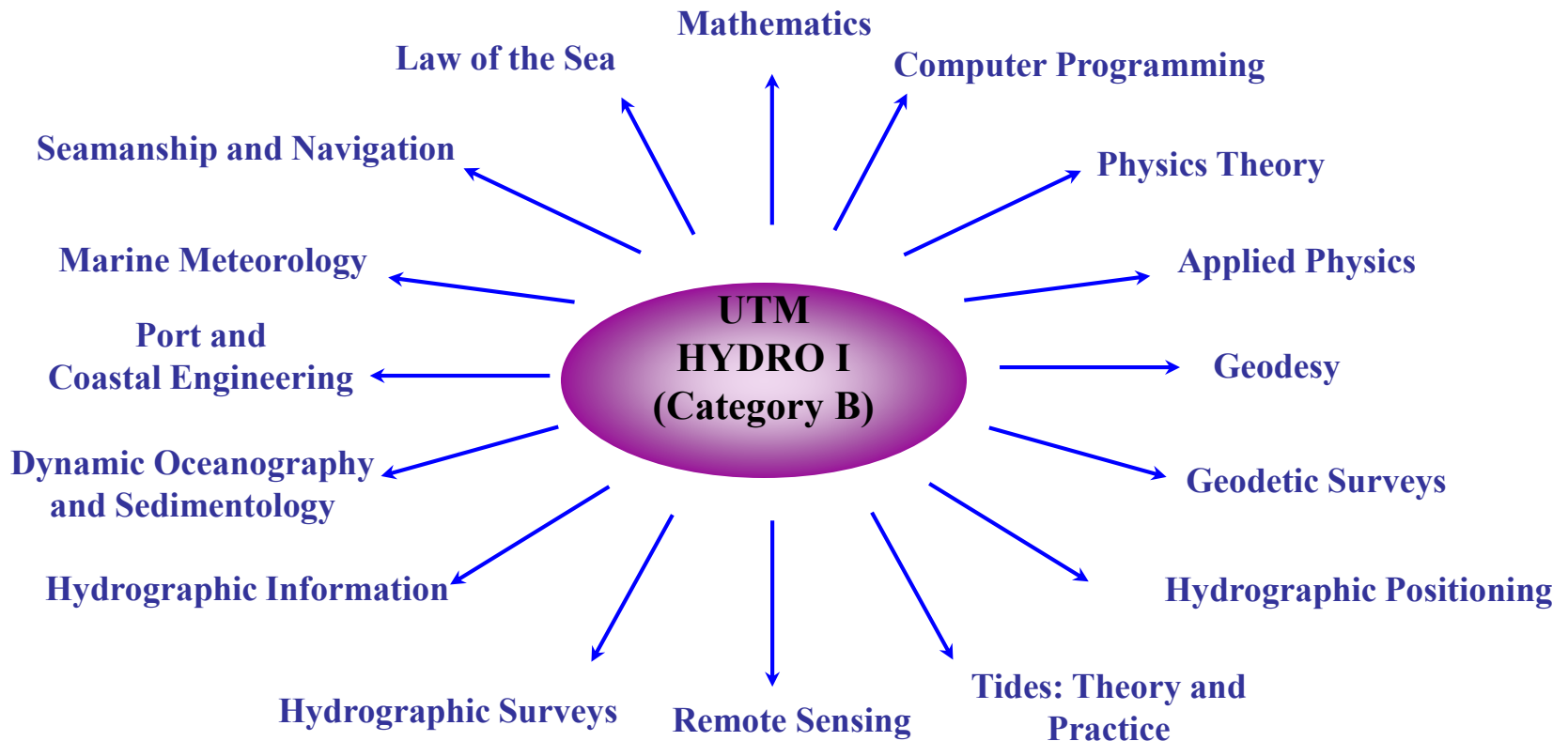
FIG/IHO/ICA UTM CARTO I - 2016

Due for 1st renewal - 2022

**UNIVERSITI TEKNOLOGI MALAYSIA
&
NATIONAL HYDROGRAPHIC CENTRE**

Professional Hydrographic Training

FIG/IHO/ICA UTM HYDRO I



List of HYDRO I Graduates
(14 November 1995 – 18 May 1996)

1st UTM HYDRO I (1995/1996)

No	Name	Employer
1	Zulkaffle Zakaria	Jurukur Perunding Services Sdn. Bhd.
2	Muhd Syahamirul Edinin Abdul Hamid	Jurukur Teguh (M) Sdn. Bhd.
3	Ramlee Wahidin	Department of Survey & Mapping, Malaysia
4	Mohd Sharif Abu	Klang Port Management Sdn. Bhd.
5	Qasim Said	Royal Malaysian Navy
6	Ahmad Shahlan Mardi	Universiti Teknologi Malaysia

List of HYDRO I Graduates
(14 April 1997 – 28 September 1997)

2nd UTM HYDRO I (1997)

No	Name	Employer
1	Zulkifli Maarof	Department of Survey & Mapping, Malaysia
2	Azad Hussein	Department of Survey & Mapping, Malaysia
3	Mohamed Isa Noordin	Department of Survey & Mapping, Malaysia
4	Roslan Hassan	Jurukur Teguh (M) Sdn. Bhd.
5	Haliza Harry	Brunei Shell Petroleum Co. Sdn. Bhd.
6	Sharuzaman Mat Noruddin	Royal Malaysian Navy
7	Shahri Sujak	K.T. Wah & Rakan

List of HYDRO I Graduates
 (20 April 1998 – 4 October 1998)

3rd UTM HYDRO I (1998)

No	Name	Employer
1	Hairil Annuar Mohd Dari	Jurukur Teguh (M) Sdn. Bhd.
2	Allan Ng Thean Wah	Student
3	Koo Siew Kiang	Student
4	John Dominic AK Ganing	Student
5	Abdullah Hassan Al-Refaei	Armed Forces, United Arab Emirates
6	Abdullah Mohammed	Armed Forces, United Arab Emirates
7	Jose AK Galang	Sarawak River Board
8	Abd Razak Mohamed	Royal Malaysian Navy

List of HYDRO I Graduates
(2 May 2000 – 14 October 2000)

4th UTM HYDRO I (2000)

No	Name	Employer
1	Mohamad Nizam Rahmat	Jurukur Tempatan Sdn. Bhd.
2	Hasnan Hussin	Department of Survey & Mapping, Malaysia
3	Mohd Azram Zainal Abidin	Hydrokaji Survey Sdn. Bhd.
4	Kelvin So Beng Kwang	So Sun Sing Sdn. Bhd.
5	Sarkawi Numan	Sarawak Marine Department
6	Mohd Shukri Mohd Yusop	Royal Malaysian Navy
7	Kamaruddin Mohamad	Royal Malaysian Navy
8	Nasser Ali	Royal Navy of Oman

List of HYDRO I Graduates
(9 April 2001 – 8 September 2001)

5th UTM HYDRO I (2001)

No	Name	Employer
1	Ismail Mohd Deni	Royal Malaysian Navy
2	Mohd Yussof Mohd Ali	Royal Malaysian Navy
3	Rohayu Husain	Royal Malaysian Navy
4	Mohd Firdaus Mohd Tahir	Royal Malaysian Navy
5	Azrul Nezam Asri	Royal Malaysian Navy
6	Mohd Faizal Hassan	Royal Malaysian Navy
7	Mahadziar Mat Lim	Royal Malaysian Navy
8	Herman Mohammad Shariff	Royal Malaysian Navy
9	Sahardi Sidek	Royal Malaysian Navy

List of HYDRO I Graduates
 (8 May 2002 – 26 October 2002)

6th UTM HYDRO I (2002)

No	Name	Employer
1	Daniel Thanam Divean	RDN Semenanjung Geoinfo Sdn. Bhd.
2	Nasarudin Abu Hassan	Impian Hydrographic Services Sdn. Bhd.
3	Foudzay Adis	Sarawak Marine Department
4	Ganesan Arumugam	Hydrokaji Survey Sdn. Bhd.
5	Aznizam Suratman	Inai Kiara
6	Jerome Tsu Beng Siong	Fugro
7	Kang Hen Leong	Swift Survey Pte. Ltd.
8	Teo Boon Hoe	Swift Survey Pte. Ltd.
9	Ali A. Al-Kandary	Ministry of Communication, Kuwait
10	Jamal M. Al-Kandary	Ministry of Communication, Kuwait

List of HYDRO I Graduates
 (8 May 2002 – 26 October 2002)

6th UTM HYDRO I (2002)

continues...

No	Name	Employer
11	Yap Tian Hoe	YJP Surveyor Pte. Ltd.
12	Mohd Lokman Nordin	Royal Malaysian Navy
13	Silvanathan Murugan	Royal Malaysian Navy
14	Mohamad Yasir Ali	Royal Malaysian Navy
15	Saffiya Ahmad Tajuddin	Royal Malaysian Navy
16	Mohd Helmi Kholil	Royal Malaysian Navy
17	Mohd Syahir Eleas	Royal Malaysian Navy
18	Azeri Mat	Royal Malaysian Navy
19	Elias Abdul Rahim	Royal Malaysian Navy
20	Ahmad Rizuan Hussin	Royal Malaysian Navy
21	Ariffin Embong	Royal Malaysian Navy

List of HYDRO I Graduates
 (12 May 2003 – 22 October 2003)

7th UTM HYDRO I (2003)

No	Name	Employer
1	Yahya Saed S.F. Al-Jaffali	Ministry of Municipal Affairs, Qatar
2	Ahmed Fathih	Armed Forces, Republic of Maldives
3	Dissanayake Mudiyanseelage Nalinda Presad Dissanayake	Sri Lanka Navy, Sri Lanka
4	Rajamohan Munisamy	Geometra International Pte Ltd, Singapore
5	Fernando Acuña	Fugro Survey Pte Ltd, Singapore
6	Adam Anggot	Sarawak Marine Department
7	Mohd Fauzi Japarudin	Sarawak Marine Department
8	Roslan Mohd Ramli	Sarawak Marine Department
9	Norhasbullah Abu	Royal Malaysian Navy
10	Azuan Aziz	Royal Malaysian Navy

List of HYDRO I Graduates
(12 May 2003 – 22 October 2003)

7th UTM HYDRO I (2003)

No	Name	Employer
11	Mohd Helmie Ibrahim	Royal Malaysian Navy
12	Norzaidi Kamal Zainun	Royal Malaysian Navy
13	Musa Paiman	Royal Malaysian Navy
14	Mohd Azharin Mohd Sahrie	Jurukur Saharuddin El-Asas

List of HYDRO I Graduates
 (22 March 2005 – 22 September 2005)

8th UTM HYDRO I (2005)

No	Name	Employer
1	Saif Obaid Saeed Obaid Al Mazrouie	Military Survey Department (MSD)
2	Yousef Ali bin Rabeea Al Naqbi	Military Survey Department (MSD)
3	Ezanizam bin Mat Soom	Petronas Kertih Port Sdn. Bhd.
4	Ang Thiam Poh	Surbana International Consultants Pte. Ltd.
5	Ong Ban Soon	Surbana International Consultants Pte. Ltd.
6	Sazali bin Mahmud	Department of Geomatic Science MARA
7	Mohd Zuraimy bin Saad	Inai Kiara Sdn. Bhd.
8	Zulkarnain bin Samat	Inai Kiara Sdn. Bhd.
9	Dihoi Anak Nyomeb	Bintulu Port Sdn. Bhd.

List of HYDRO I Graduates
 (16 November 2007 – 24 April 2008)

9th UTM HYDRO I (2007/2008)

No	Name	Employer
1	Ahmed Ali Ahmed Al-Badi	Royal Navy of Oman
2	Ahmed Rashid Hamed Al Mamari	Royal Navy of Oman
3	Asmuni Mohammad Ali	Maritime Enforcement Coordinating Centre
4	Ismaezani Md. Ismail	Royal Malaysian Navy
5	Khairul Azlan Abdul Rashid	Royal Malaysian Navy
6	Lim Siong Hui	Royal Malaysian Navy
7	Mohamad Sufian Othman	Royal Malaysian Navy
8	Mohamad Tabrizzal Fitry Zaidi	Royal Malaysian Navy
9	Mohd Amri Mohd Anuar	Royal Malaysian Navy
10	Mohd Hilmi Mohd Amin	Royal Malaysian Navy
11	Mohd Khairunie Mohammed	Royal Malaysian Navy
12	Md Yusral Hakim Yusoff	Royal Malaysian Navy
13	Tan Hean Chee	Royal Malaysian Navy

List of HYDRO I Graduates
 (9 June 2008 – 27 November 2008)

10th UTM HYDRO I (2008)

No	Name	Employer
1	Abdul Hakeem Tawfeeq Marzooq Al Baroot	Royal Navy of Oman
2	Abdul Majid Haji Rais	Marine Department
3	Khalifa Saif Hamed Al Busaidi	Royal Navy of Oman
4	Mohammad Shahrom Md Salim	Royal Malaysian Navy
5	Mohammad Shaiful Suhaimie	Royal Malaysian Navy
6	Mohd Khairulnizam Abdul Khair	Inai Kiara Sdn. Bhd.
7	Mohd Shaharuddin Mohamad	Inai Kiara Sdn. Bhd.
8	Mohd Shukri Mohamad Yaakob	Royal Malaysian Navy
9	Muhammad Abi Khalifah Rabudin	Royal Malaysian Navy
10	Muhammad Nashahi Nazri	Royal Malaysian Navy
11	Muhammad Shahanizam Shaharil Hisham	Royal Malaysian Navy
12	Nordzazali Nordin	Malaysian Maritime&Dredging Corporation
13	Syed Osman Jeelani	Utec Survey Limited
14	Zulhilmi Sahbudin	Royal Malaysian Navy

11th UTM HYDRO I (2010)

March - September 2010

- 1. Ahmed Naser Hasan N. A. Aal Ali
(Military Survey Department)**
- 2. Ahmad Saleh Berk Karama Al Katheeri
(Military Survey Department)**
- 3. Khameis Rabei Obaid Saeed Kayyani
(Military Survey Department)**
- 4. Abdulla Salem Ahmed Al Yammahi
(Military Survey Department)**
- 5. Rashid Ahmed Obaid Salim Ahmed Alnaqbi
(Military Survey Department)**
- 6. Mohammad Ibrahim Abdul Karim Taher
(Military Survey Department)**
- 7. Khaleifa Sultan Salem Hamad Hafri
(Military Survey Department)**
- 8. Abdulla Khalil Ibrahim Saeed Al Hosani
(Military Survey Department)**

12th UTM HYDRO I (2010)

May - October 2010

- 1. Ahmad Fahmi Abd. Majid (Jurukur Dr. Abd. Majid)**
- 2. Ahmad Zaki Mohamad (MHS Survey Consultant)**
- 3. Anup Kumar Sharma**
- 4. Han Boon Juan (Atlas Consulting Surveyors)**
- 5. Khairul Saleh Jamaludin (Ukur Perkasa)**
- 6. Mahasamilage Buddhadasa Sajeewa Senanayake
(Geometra International (Private) Ltd.)**
- 7. Mbanefo Jideofo Fabian (Strides Energy & Maritime)**
- 8. Mohd Fawwaz Nordin (Hydrokaji Survey Sdn. Bhd.)**
- 9. Mohd Syahrim Mohd Yussop**
- 10. Muhammad Faisal Mohd Maideen (Jurukur Putra)**

13th UTM HYDRO I (2011)

April - September 2011

- 1. Akmal Hijjaz bin Ahmad Rustami (Jurukur Abadi)**
- 2. Ian Jarrod Joanes**
- 3. Mohamed Shifaf (Sandcays Pvt Ltd)**
- 4. Ibrahim Mizal Mohamed (Sandcays Pvt Ltd)**
- 5. Mohd Aliff bin Hai'adz (Bintulu Port Sdn. Bhd.)**
- 6. Mohd Faiz bin Alias (Jurukur Mahabob & Co Sdn. Bhd.)**
- 7. Sharwin s/o Palaniasamy**

14th UTM HYDRO I (2011/2012)

October 2011 - April 2012

- 1. Airee Ridzuan bin Abdul Razak (TL
Geohydrographics Sdn. Bhd.)**
- 2. Fazli bin Sukirman (TL Geohydrographics
Sdn. Bhd.)**
- 3. Khalaf bin Mohammed bin Khalaf Al
Masani (Royal Navy of Oman)**
- 4. Khalid Abu Elgasim Ahmed**
- 5. Hamdan Mohammed Shmail Daen Al
Rashedi (G. H. Q. Armed Forces
Administration & Manpower Staff)**
- 6. Hassan Saeed Abdulla Al Madhaani (G. H.
Q. Armed Forces Administration &
Manpower Staff)**
- 7. Nasir Khamis Abdalla Al Zaabi (G. H. Q.
Armed Forces Administration &
Manpower Staff)**

15th UTM HYDRO I (2014)

- 1 Mohamnad Rafeq Paimin
- 2 Muhammad Kamal Amir Abu Husin
- 3 Khairul Anwar Khalid
- 4 Fakhrul Anwar Mohamad Rafiai
- 5 Badrul Hisham Ismail
- 6 Ling Siaw Ming
- 7 Mohd Azahar Rosly
- 8 Mohd Safwan Nizam Mohamad Rahim
- 9 Alvin Entinggi Nichol
- 10 Ernest Khoo Hock Oon
- 11 Chin Yow Cheong
- 12 Zamir Suparman
- 13 Muhammmad Nabbil Faiz

16th UTM HYDRO I (2015)

- 1 **Jamiatulsyaheera Binti Zamri**
- 2 **Mohamad Farhan Bin Ramli**
- 3 **Muhammad Naufal Na'im Bin Saaid**
- 4 **Syadza Fathin Binti A. Manap**
- 5 **Muhamad Hazwan Bin Mohd Mazlan**
- 6 **Muhamad Imran Bin Muhammad Rasyid**
- 7 **Ahmad Nashriq Ferdaus Bin Ahmad Nasaruddin**
- 8 **Mohd Khairool Bin Norezan**
- 9 **Chum Yit Xin**
- 10 **Mohamad Yazid Bin Jamian**
- 11 **Mohammad Zulhimi Bin Che Abdullah**
- 12 **Mohd Khairulazree Bin Sulaiman**

17th UTM HYDRO I (2015)

- 1 Mohd Khairulnizam Bin Matsa
- 2 Mohamad Hazli Baharudin
- 3 Noor Khairul Idham Bin Nordin
- 4 Hendi Setiawan
- 5 Mohammad Nizam Bin Azhan
- 6 Menari Anak Igon
- 7 Sukhbir Singh A/L Gurcharan Singh
- 8 Muhammad Syahir Bin Khozali
- 9 Mohd Iqbal Bin Aznan
- 10 Omar Bin Mat Hussain
- 11 Mohd Azlan Bin Ismail
- 12 Mohd Fazlen Bin Mohd Nor

18th UTM HYDRO I (2019)

No	Name	Company
1	Encik Amir Shah Ramadan	Northport Malaysia Bhd
2	Encik Muhammad Shahir Azhar	Johor Port Berhad
3	LT Fedzrin Iswandi Mohd Nor	TLDM
4	LT Dya Muhammad Hafidzuddin Mohd Norzalan	TLDM
5	LT Dya Yeganraj Sivalingam	TLDM
6	LT Dya Mohamad Sufi Mohamad Noor	TLDM

GALLERY OF HYDROGRAPHIC SURVEY



inc

International Course on Hydrographic Surveying (HYDRO I Course) 9 June 2008 - 27 November 2008



Front (from left): Mr. Khalifa Saif Hamed Al Busaidi, Mr. Nordzazali Nordin, Dr. Abdullah Hisam Omar (Instructor), Mr. Zulkarnanini Mat Amin (Instructor), Prof. Dr. Mohd Razali Mahmud (Course Director), Mr. Rusli Othman (Instructor), Mr. Ahmad Shahlan Mardi (Instructor), Mr. Abdul Hakeem Taufeeq Al Baroot
 Back (from left): Mr. Mohd Khairulnizam Abdul Khair, Mr. Mohammad Shaiful Suhaimi, Mr. Muhammad Shahanizam Shaharil Hisham, Mr. Mohd Shukri Mohamad Ya'akob, Mr. Muhammad Nashahi Nazri, Mr. Mohd Shaharuddin Mohamad, Mr. Mohamad Shahrom Md. Salim, Mr. Muhammad Abi Khalifa Rabudin, Mr. Zulhili Sahbudin, Mr. Abd. Majid Rais, Mr. Syed Osman Jeelani

2008
 UTM HYDRO

**UNIVERSITI TEKNOLOGI MALAYSIA
&
NATIONAL HYDROGRAPHIC CENTRE**

Professional Hydrographic Training

FIG/IHO/ICA UTM HYDRO II

UTM HYDRO II PROGRAMME

Background

- First recognition in 1998 and re-recognition in 2008 and 2014.

UTM HYDRO II PROGRAMME

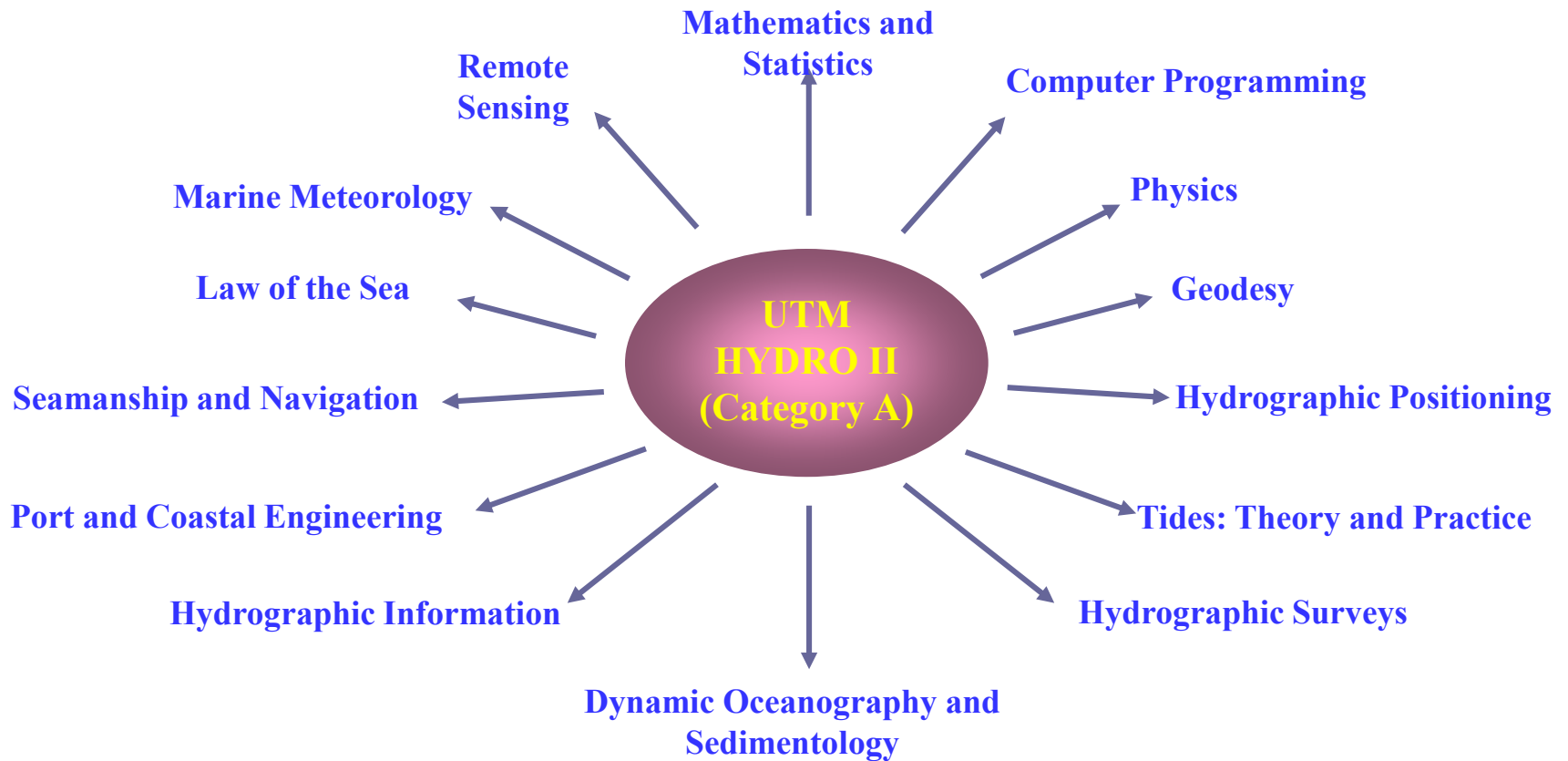
Objective

To provide the student with a thorough knowledge of hydrographic surveying in order to carry out the various hydrographic surveying tasks.

UTM HYDRO II PROGRAMME

Entry Qualifications

- For an applicant to qualify and fulfill the requirement of applying to the UTM HYDRO II Programme, he/she must have a Bachelors degree or possessed Category B certificate.



COURSES

1. **MA2** : **Mathematics and Statistics**
2. **CP2** : **Computer Programming**
3. **PY2** : **Physics**
4. **RS2** : **Remote Sensing**
5. **SN2** : **Seamanship and Navigation**
6. **RM2** : **Marine Meteorology**
7. **LS2** : **Law of the Sea**
8. **GE2** : **Geodesy**
9. **HS2** : **Hydrographic Surveys**
10. **HI2** : **Hydrographic Information**
11. **ES2** : **Hydrographic Positioning**
12. **TI2** : **Tides: Theory and Practice**
13. **OS2** : **Dynamic Oceanography and Sedimentology**
14. **HP2** : **Port and Coastal Engineering**
15. **HF2** : **Hydrographic Field Survey Practice**

1st UTM HYDRO II (1999)

No	Name	Employer
1	Wan Zainolldin Wan Musa	Sarawak Marine Department
2	Syamirul Edinin Abd Hamid	Jurukur Teguh (M) Sdn. Bhd.
3	Nazarudin Mohd Dom	Teknik Glora Ltd.
4	Mohd Zakir Abu Bakar	Teknik Lengkap Ltd.
5	Mohd Rashdan Mohd Yunus	Royal Malaysian Navy
6	Ramlee Wahidin	Department of Survey & Mapping, Malaysia
7	Ahmad Shahlan Mardi	Universiti Teknologi Malaysia

2nd UTM HYDRO II (2001)

No	Name	Employer
1	Mohamad Nizam Rahmat	Jurukur Tempatan Sdn. Bhd.
2	Mohd Azram Zainal Abidin	Hydrokaji Survey Sdn. Bhd.
3	Kelvin So Beng Kwang	So Sun Sing Sdn. Bhd.
4	Zaaim Hasan	Royal Malaysian Navy
5	Norhizam Hassan	Royal Malaysian Navy
6	Najhan Md. Said	Royal Malaysian Navy

3rd UTM HYDRO II (2004)

No	Name	Employer
1	Kang Hen Leong	Swift Survey Pte. Ltd.
2	Rajamohan Munisamy	Geometra International Pte. Ltd.
3	Teo Boon Hoe	Swift Survey Pte. Ltd.
4	Yap Tian Hoe	YJP Surveyors Pte. Ltd.
5	Bustami bin Berahim@Ibrahim	Universiti Teknologi Malaysia
6	Ganesan Arumugam	Hydrokaji Survey Sdn. Bhd.
7	Mohd Nazam bin Sulaiman	Ibu Pejabat Laut Semenanjung Malaysia
8	Roslan bin Hassan@Ab.Wahab	Impian Hydrographic Services Sdn. Bhd.
9	Sarkawi bin Numan	Jabatan Laut Sarawak
10	Lt. Cdr. Abd Razak bin Mohamed RMN	RMN Hydrographic Department
11	Lt. Cdr. Ahmad Sahlan bin Ibrahim RMN	RMN Hydrographic Department
12	Lt. Kamaruddin bin Mohamad RMN	RMN Hydrographic Department
13	Lt. Kamaruddin bin Yussof RMN	RMN Hydrographic Department
14	Lt. Cdr. Kamrul Fahmy bin Kamarudin RMN	RMN Hydrographic Department
15	Lt. Lukman Hanafiah bin Azamar Omar@Ahmad Badaruddin RMN	RMN Hydrographic Department
16	Lt. Mazlan bin Atan RMN	RMN Hydrographic Department
17	Lt. Mohd Azli bin Ismail RMN	RMN Hydrographic Department
18	Lt. Mohd Shukri bin Mohd Yusop RMN	RMN Hydrographic Department

4th UTM HYDRO II (2005/2006)

No	Name	Employer
1	Lt. Cdr. Azhan bin Abdul Mutalib RMN	RMN Hydrographic Department
2	Lt. Cdr. Mohamad Zaid bin Hj. Sapii RMN	RMN Hydrographic Department
3	Lt. Mohd Lokman bin Nordin RMN	RMN Hydrographic Department
4	Lt. Silvanathan Murugan RMN	RMN Hydrographic Department
5	Lt. Mohd Afinda bin A.Ghani RMN	RMN Hydrographic Department
6	Lt. Mohd Faizal bin Hj. Hassan RMN	RMN Hydrographic Department
7	Lt. Mahadziar bin Mat Lim RMN	RMN Hydrographic Department
8	Lt. Herman bin Mohammad Shariff RMN	RMN Hydrographic Department

5th UTM HYDRO II (2006)

No	Name	Employer
1	Ang Thiam Poh	SURBANA International Consultans Pte. Ltd.
2	Ong Ban Soon	SURBANA International Consultants Pte. Ltd.
3	Aznizam bin Suratman	Inai Kiara Sdn. Bhd.
4	Nasser bin Ali Al Harthi	Royal Navy of Oman (RNO)
5	Foudzay bin Adis	Sarawak Marine Department

6th UTM HYDRO II (2009)

No	Name	Employer
1	Amarasinghege Nihal Dinasiri Perera	National Hydrographic Office Sri Lanka
2	Daniel T. Divean	Hydro Mappers Sdn. Bhd.
3	Azrul Nezam Asri	Royal Malaysian Navy
4	Md Fuzi Yusof	Royal Malaysian Navy
5	Khairul Anuar Abdul Aziz	Royal Malaysian Navy
6	Sahardi Sidek	Royal Malaysian Navy
7	Musa Paiman	Royal Malaysian Navy
8	Mohamad Yasir Ali	Royal Malaysian Navy
9	Rohayu Husain	Royal Malaysian Navy
10	Saleh Mohammed Al-Rahbi	Royal Malaysian Navy

7th UTM HYDRO II (2013)

- 1 Azeri Bin Mat
- 2 Akmal Hijaz Bin Ahmad Rustami
- 3 Abdul Hakeem Taufeeq Marzooq Al Baroot
- 4 Han Boon Juan
- 5 Ismaezani Bin Md Ismail
- 6 Khalifa Saif Al Busaidi
- 7 Khairul Saleh Bin Jamaludin
- 8 Mohd Hilmi Bin Mohd Amin
- 9 Mohd Khairunie Bin Mohammed
- 10 Mohammad Shaiful Bin Suhaimee
- 11 Razimi Bin Mohd Damri
- 12 Sajeewa Senanayake

8th UTM HYDRO II (2016)

- 1 AHMAD TARMIZI BIN ALWI
- 2 LING SIAW MING
- 3 ERNEST KNOO HOCK ONN
- 4 KARTHIGEYAN A/L VEERASAMY
- 5 MOHD NAZWAN HAFEEZ BIN HASHIM
- 6 HJ. ASRAWI BIN HJ BUJANG
- 7 KHALAF BIN MOHAMMED BIN KHALAF AL MUSANI
- 8 KHALID SAID SALIM AL AAMRI
- 9 MOHD SAFWAN NIZAM BIN MOHAMAD RAHIM
- 10 WAN SHAHRUL AI'MAN BIN WAN MOHD HUSSIN
- 11 MOHD FARHAN BIN MOHD NORDIN
- 12 MOHD HAFFIZ BIN MOHD HUSIN
- 13 MOHAMMAD KHAIRUL AZHARI BIN ABDUL RAZAB

9th UTM HYDRO II (2018/2019)

8 January 2018 – 10 January 2019

The Students

No.	Name	Position	Agency
1	Muhammad Kamal Amir bin Abu Husin	Land Surveyor	Jurukur Wahdah
2	Teoh Boon Siong	Licensed Land Surveyor	XYZ Survey
3	Shafizie bin Mokhtar	Hydrographic Surveyor	Geometra Surveys Sdn Bhd
4	Tan Chwee Guan		Jurukur Khoo
5	Abu Samah bin Ibrahim	Hydrography Surveyor	Freelancer
6	Lt. Kdr Syed Ahmad Fadhli bin Syed Ahmad Hilmi	PS 2 Hubungan Antarabangsa, Markas Tentera Laut	Pusat Hidrografi Negara
7	Lt Kdr Nazrul Hisham bin Abdul Wahab	Pegawai Staf Pembangunan	Pusat Hidrografi Negara
8	Ajmaen bin Superi	Licensed Land Surveyor	Azam Dinamik Survey

10th UTM HYDRO II (2018/2019)

LIST OF STUDENTS OF UTM HYDRO II FIG/IHO/ICA CATEGORY A 8 January 2018 - 10 January 2019

- 1 Abu Samah bin Ibrahim
- 2 Ajmaen bin Superi, Azam Dinamik Survey
- 3 Muhammad Kamal Amir bin Abu Husin, Jurukur Wahdah
- 4 Nazrul Hisham bin Abdul Wahab, Pusat Hidrografi Negara
- 5 Shafizie bin Mokhtar, Geometra Surveys Sdn Bhd
- 6 Syed Ahmad Fadhli bin Syed Ahmad Hilmi, Pusat Hidrografi Negara
- Tan Chwee Guan Surveyor, Jurukur Khoo
- 8 Teoh Boon Siong, XYZ Survey
- 9 Karthigeyan A/L Veerasamy, AQVASPACE Sdn Bhd

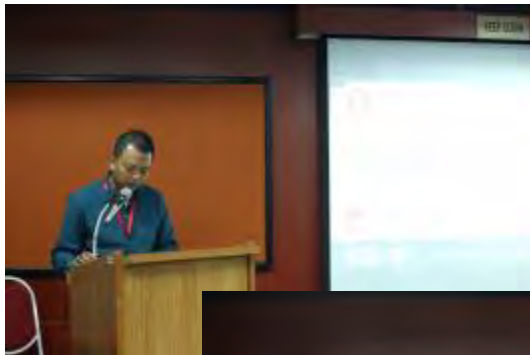
11th UTM HYDRO II (2019/2020- on-going)

LIST OF PARTICIPANTS OF UTM HYDRO II FIG/IHO/ICA CATEGORY A 20 January 2019 - 23 January 2020

- 1 Ahmad Nazri bin Muji, Ezam & Associate
- 2 Joshua Teoh Land Surveyor XYZ Survey
- 3 Mohd Khairulnizam bin Abdul Khair, Inai Kiara Sdn. Bhd
- 4 Muhammad Syahmi bin Ahamad Kamal
- 5 Idzwan Naim bin Mohd Norwawi, RMN Officer Pusat Hidrografi Negara
- 6 Mohd Ikmal Fahma bin Mat Dani, RMN Officer Pusat Hidrografi Negara
- 7 Mohd Izzat bin Mohd Noh, RMN Officer Pusat Hidrografi Negara
- 8 Mohd Khairie bin Hatun, RMN Officer Pusat Hidrografi Negara

UTM HYDRO II CATEGORY A 2018 8 January 2018 – 10 January 2019

Programme Launching [8 January 2018]



UTM HYDRO II CATEGORY A 2018

8 January 2018 – 10 January 2019

Teaching & Learning Activities



Briefing from UTM Library

UTM HYDRO II CATEGORY A 2018

8 January 2018 – 10 January 2019

Technical Visit to The Port of Tanjung Pelepas (PTP), Johor [3 July 2018]



For subject Port and Coastal Engineering

UTM HYDRO II CATEGORY A 2018

8 January 2018 – 10 January 2019

Technical Visit to The Port of Tanjung Pelepas (PTP), Johor [3 July 2018]



For subject Port and Coastal Engineering

UTM HYDRO II CATEGORY A 2018

8 January 2018 – 10 January 2019

Fieldwork for Hydrographic Positioning



UTM HYDRO II CATEGORY A 2018

8 January 2018 – 10 January 2019

Fieldwork for Remote Sensing



UTM HYDRO II CATEGORY A 2018

8 January 2018 – 10 January 2019

Fieldwork for Hydrographic Survey – Kampung Pendas, Gelang Patah



UTM HYDRO II CATEGORY A 2018

8 January 2018 – 10 January 2019

Technical Visit to The Johor Port





**International Course on Hydrographic Surveying
 (UTM HYDRO II Course)
 13 January 2009 - 28 May 2009**

Front (from left): Mr. Samsudin Ahmad (Lecturer), Mr. Rusli Othman (Lecturer), Mr. Che Lokman Jaafar (Lecturer), Prof. Dr. Mohd Razali Mahmud (Course Director), Prof. Dr. Sahrum Ses (Dean Faculty of Geoinformation Science & Engineering), Mr. Ahmad Shahlan Mardi (Lecturer), Assoc. Prof. Dr. Md Nor Kamarudin (Lecturer), Assoc. Prof. Mohd Safie Mohd (Lecturer), Mrs. Rohayu Husain
Back (from left): Mr. Saleh Mohammed Al-Rahbi, Mr. Md Fuzi Yusof, Mr. Daniel T. Divean, Mr. Sahardi Sidek, Mr. Amarasinghege Nihal Dinasiri Perera, Mr. Azrul Nezam Asri, Mr. Musa Paiman, Mr. Khairul Anuar Abdul Aziz, Mr. Mohamad Yasir Hj. Ali

CLASSROOM



ACTIVITIES



ACTIVITIES



ACTIVITIES



ACTIVITIES



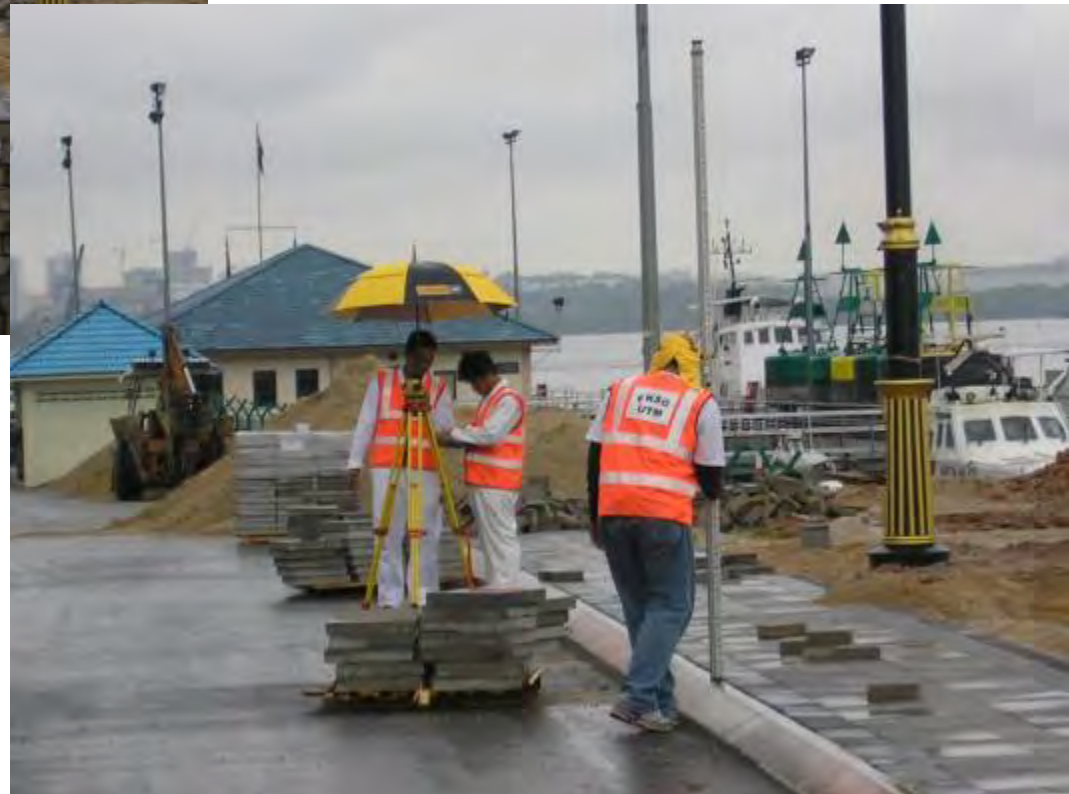
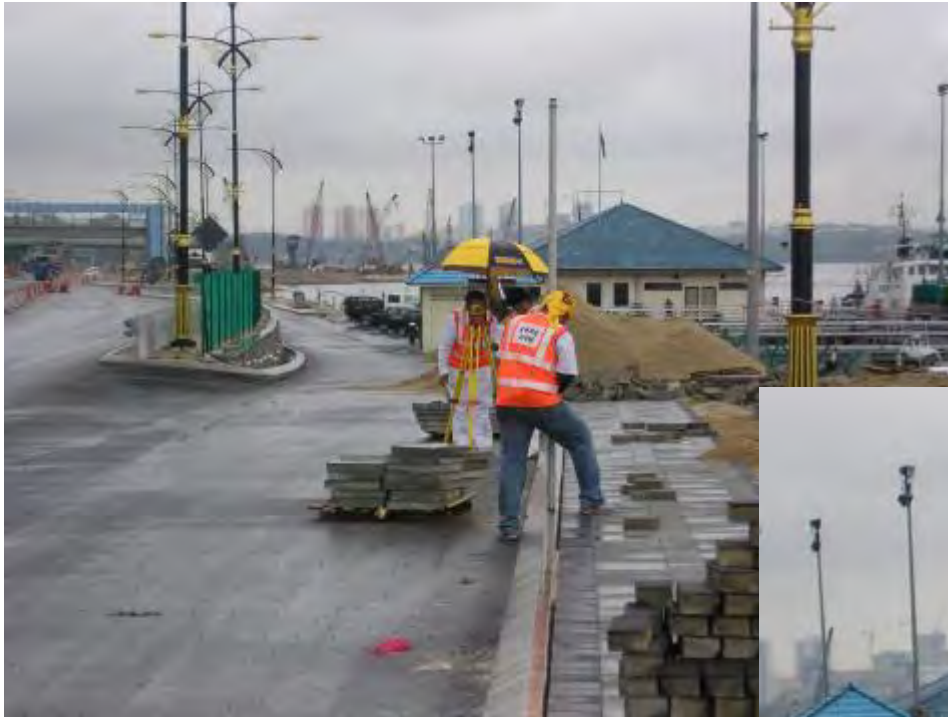
ACTIVITIES



ACTIVITIES



ACTIVITIES



**UNIVERSITI TEKNOLOGI MALAYSIA
&
NATIONAL HYDROGRAPHIC CENTRE**

Professional Hydrographic Training

**FIG/IHO/ICA UTM HYDRO III - 2018
Licensed/Registered Land
Surveyors**

**UNIVERSITI TEKNOLOGI MALAYSIA (UTM)
NATIONAL HYDROGRAPHIC CENTRE (NHC)
DEPARTMENT OF SURVEY AND MAPPING MALAYSIA
(DSMM)
LAND SURVEYORS BOARD MALAYSIA (LJT)
&
THE ASSOCIATION OF AUTHORISED LAND
SURVEYORS MALAYSIA (PEJUTA)**

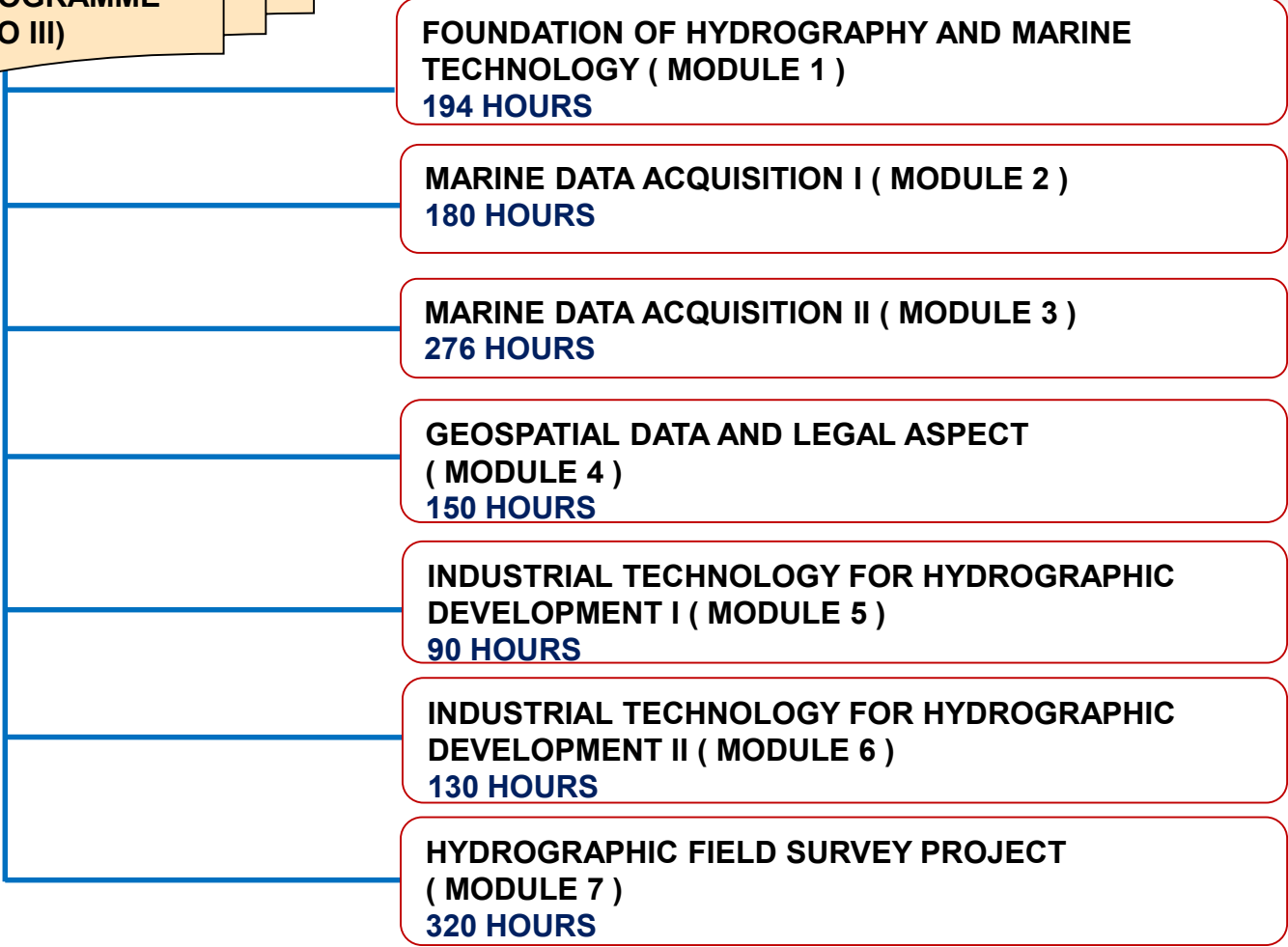
**Professional Hydrographic Training
FIG/IHO/ICA UTM HYDRO III - 2018**



UTM HYDRO III MODULES

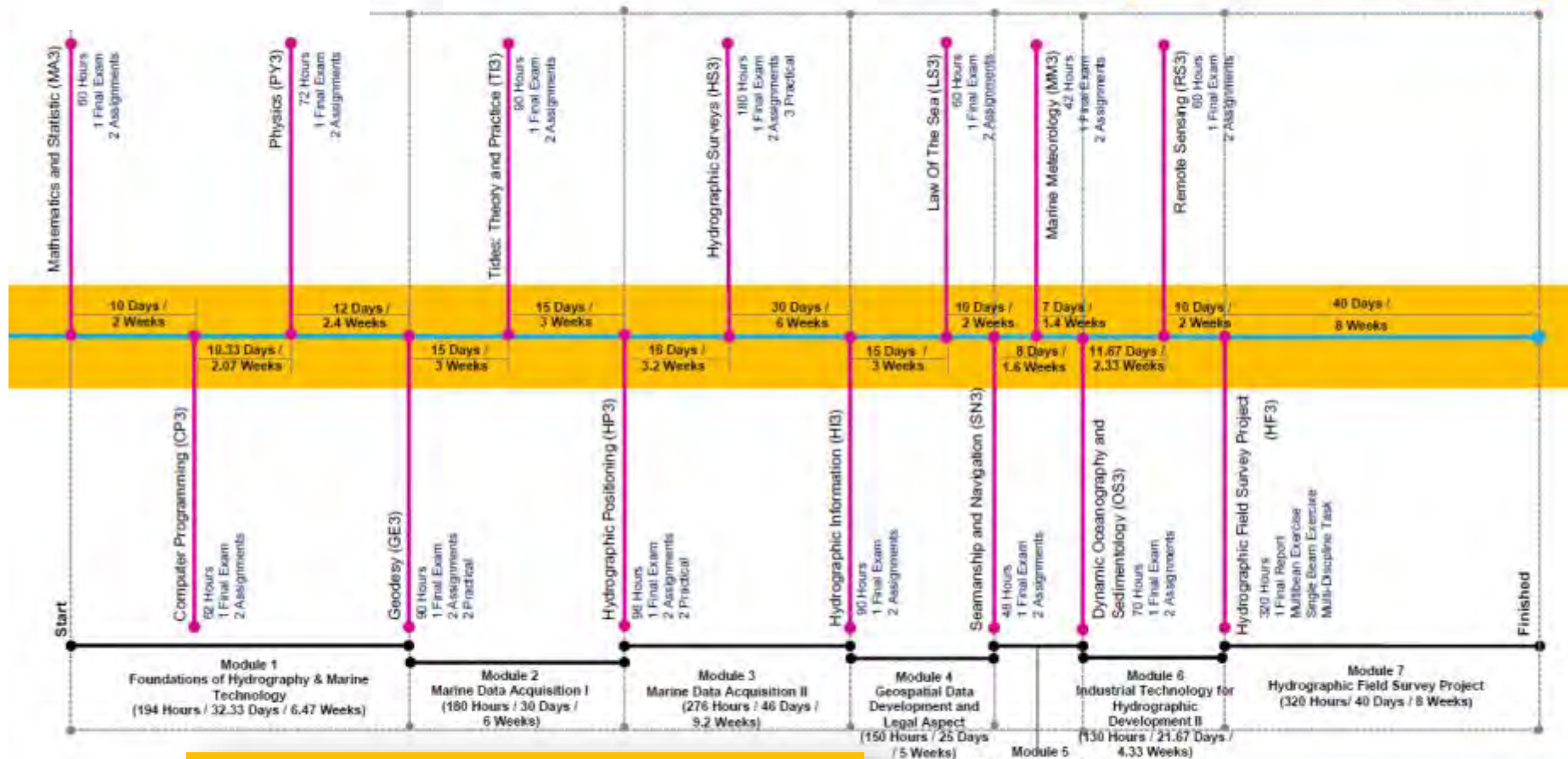
HYDROGRAPHY AND MARINE TECHNOLOGY PROGRAMME (UTM HYDRO III)

Modules and Duration of Hydrography and Marine Technology Programme (UTM HYDRO III)



HYDROGRAPHY AND MARINE TECHNOLOGY PROGRAMME (UTM HYDRO III)

Total
1,340 : Hours
42: Weeks
1020 Hours : Class/Exam/Exercise/Assignment/Self-Study
34 Weeks : Class/Exam/Exercise/Assignment/Self-Study
Based on 6 Hours Class
320 Hours: HF3
8 Weeks (Not include Saturday and Sunday) : HF3
Based on 8 Hours



DURATION OF PROGRAMME MODULE

Note:
● Subjects Offered
— Continues Programme Timeline
— Module Programme Timeline

This programme has been designed the adaptable and flexible mode to complete this programme in 42 weeks.

**UNIVERSITI TEKNOLOGI MALAYSIA
&
NATIONAL HYDROGRAPHIC CENTRE**

Professional Hydrographic Training

**FIG/IHO/ICA UTM CARTO I
(Marine Geospatial & Cartography
Programme)**

PROGRAMME MODULE SEPARATION AND STAFF LISTS



MODULE 1			
FOUNDATIONS OF MARINE GEOSPATIAL INFORMATION			
Unit	Code	Subject	Instructor
1	M1A	Fundamental of Marine Geospatial Information	Dr. Ivin Amri Musliman
2	M1B	Fundamental of Cartographic Environment	Assoc. Prof. Mohd Safie Mohd
MODULE 2			
MARINE DATA ACQUISITION I			
Unit	Code	Subject	Instructor
1	M2A	Hydrographic Surveys	Prof. Sr Dr. Mohd Razali Mahmud
MODULE 3			
MARINE DATA ACQUISITION II			
Unit	Code	Subject	Instructor
1	M3A	Physical and Dynamic Oceanography	Mr. Abu Bakar Fadzil @ Zulkifly
2	M3B	Marine Geology	Prof Dr. Adi Maimun Abdul Malik

PROGRAMME MODULE SEPARATION AND STAFF LISTS



MODULE 4

INDUSTRIAL TECHNOLOGIES FOR MARINE GEOSPATIAL AND CARTOGRAPHIC DEVELOPMENT

Unit	Code	Subject	Instructor
1	M4A	Marine Geospatial for Offshore Surveys	Mr. Noor Safaruddin Kamaruddin
2	M4B	Photogrammetry	Sr Dr. Zulkarnaini Mat Amin
3	M4C	Remote Sensing	Sr Dr. Mohd Farid Mohd Ariff

MODULE 5

GEOSPATIAL COMPILATION, PROCESSING, ASSESSMENT AND PRODUCTION

Unit	Code	Subject	Instructor
1	M5A	Marine Geographical Information System	Dr. Ivin Amri Musliman
2	M5B	Nautical Charting and ENCs	Lt. Cdr Mohd Shukri Mohamad Ya'akob
3	M5C	Nautical Assessment, Compilation and Production	Assoc. Prof. Mohd Safie Mohd
4	M5D	Compiling Bathymetry, Contouring and Other Features	Lt. Cdr (Rtd) Mohd Hanapi Mansor
5	M5E	Product Finishing and Visualisation	Lt. Cdr (Rtd) Mohd Hanapi Mansor
6	M5F	Marine Geospatial Technologies	Dr. Muhamad Uznir Ujang

PROGRAMME MODULE SEPARATION AND STAFF LISTS



MODULE 6			
IMPLEMENTING MARINE GEOSPATIAL DATA INFRASTRUCTURE (MGDI)			
Unit	Code	Subject	Instructor
1	M6A	MGDI Implementation	Dr. Ivin Amri Musliman
2	M6B	The Practical Use of GIS for MGDI Application	Dr. Muhamad Uznir Ujang
3	M6C	Marine Information Standard	Lt. Cdr. Mohd Shukri Mohamad Ya'akob
4	M6D	Statistical Analysis	Mr. Che Lokman Jaafar
MODULE 7			
MARINE ENVIRONMENTAL AND LEGAL ASPECT			
Unit	Code	Subject	Instructor
1	M7A	Liability and Law of the Sea	Prof. Sr Dr. Mohd Razali Mahmud
MODULE 8			
MARINE GEOSPATIAL PRACTICAL			
Unit	Code	Subject	Instructor
1	M8A	Marine Geospatial Data Infrastructure Project	Assoc. Prof. Mohd Safie Mohd
2	M8B	ENCs for Nautical Charting and Production Project	Lt. Cdr. Mohd Shukri Mohamad Ya'akob

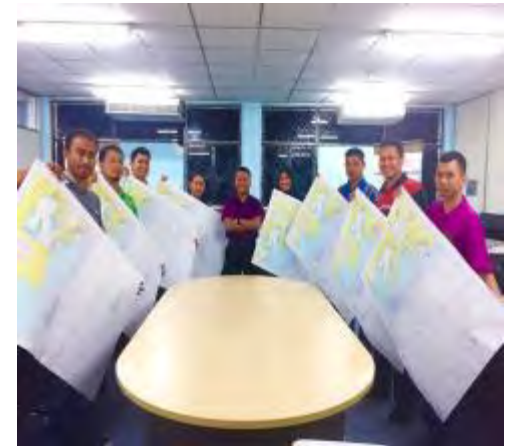
MARINE GEOSPATIAL AND CARTOGRAPHY CATEGORY B

10 JULY 2017 – 21 DECEMBER 2017



MARINE GEOSPATIAL AND CARTOGRAPHY CATEGORY B

10 JULY 2017 – 21 DECEMBER 2017



1st UTM CARTO I (2017)

- 1 Harry Shahriyon bin Zulkafli
- 2 Meyriner AK Disen
- 3 Mohd Iqbal bin Azman
- 4 Mohd Rizuadi bin Razab
- 5 Muhammad Khairul bin Abdullah
- 6 Nur Aqidah binti Abdul Aziz
- 7 Suffian bin Rambli
- 8 Wan Mohd Suhaimi bin Wan Salleh

UTM HYDRO III CATEGORY A 2018

5 October 2018 – 4 August 2019



UTM HYDRO III Officiated by YBhg. Dato' Sr Mohd Noor bin Isa

UTM HYDRO III CATEGORY A 2018

5 October 2018 – 4 August 2019

Teaching & Learning Activities



1st UTM HYDRO III (2018/2019)



LIST OF STUDENTS

HYDROGRAPHY AND MARINE TECHNOLOGY PROGRAMME

UTM HYDRO III FIG/IHO/ICA CATEGORY A

GRADUATION

AMAN HAMIDI BIN MOHAMMAD SSC SURVEY CONSULTANT

ABD. MALIK BIN YAHDY MALIK & CO.

DEVAN A/L SAMINATHAN SPATIAL SURVEY CONSULTANT

FAKHRUL AZMAN BIN ALI JURUKUR HIKMAH

GENGATHARAN A/L MARIAPPAN GEOMA SURVEY CONSULTANT

HAFIZI BIN ISMAIL JURUKUR HAFIZI

LEONG HON CHENG JURUKUR PACIFIC

LEOW KAM CHOY JURUKUR MEGAHJAYA

MAHADI BIN SUBOH JURUKUR MAHADI

MOHD ROZI BIN LATIB JURUKUR INDAH

MOHD HAFIZI BIN MOHD ZAWI JURUKUR ESA SDN BHD

NG BOON CHYE JURUKUR GEOMARK CONSULT

NORDIN BIN MD ARENA UKUR

SHAH NIZAM BIN BASIRUN JURUKUR DINAR

SIVAGANAM A/L KANAGARATNAM SK SURVEY CONSULTANCY

YIP KIT MENG ENVIRO LAND SERVICE

ZAINAL ABIDIN BIN KAMARUDDIN JURUKUR VISI


UTM
 UNIVERSITI TEKNOLOGI MALAYSIA

UTM HYDROGRAPHIC SURVEYING PROGRAMMES

Organised by:

 Centre for Hydrographic Studies (CHS)
 Faculty of Built Environment and Surveying

UTM Hydrographic Surveying I Programme (UTM HYDRO I) FIGI/HO/ICA Category B



Aim of the Programme

- To produce Hydrographic Surveyors that fulfil the Standards of Competence according to the S-5B Standards of the International Hydrographic Organisation.

Entry Requirement

- Diploma in Land Surveying / Geomatics Engineering / Civil Engineering / Computer Science / Naval Science or other related fields, OR
- Three (3) years working experience in hydrographic surveying field (to nominate at least one (1) professional reference)

UTM Hydrographic Surveying II Programme (UTM HYDRO II) FIGI/HO/ICA Category A



Aim of the Programme

- To produce Hydrographic Surveyors that fulfil the Standards of Competence according to the S-5A Standards of the International Hydrographic Organisation.

Entry Requirement

- Degree in Land Surveying / Geomatics Engineering / Civil Engineering / Computer Science / Naval Science or other related fields, OR
- Fully accredited Category B (FIGI/HO/ICA) certificate.

Hydrography and Marine Technology Programme (UTM HYDRO III) FIGI/HO/ICA Category A



Aim of the Programme

- To train and expose a hydrographic surveyor towards the development and market demand within the mapping and marine industry according to the S-5A Standards of the International Hydrographic Organisation.

Entry Requirement

- Degree in Land Surveying or Geomatics Engineering, AND
- Registered with the respective Land Surveyors Board Malaysia (LJTB), The Association of Consulting Licensed Land Surveyors (A/CLS) and Sabah Surveyors Board (SASJ/TA)

Marine Geospatial and Cartography Programme FIGI/HO/ICA Category B



Aim of the Programme

- To cater for professionals who are competence, creative and innovative as marine geospatial and cartographers according to the S-5B Standards of the International Hydrographic Organisation.

Entry Requirement

- Diploma in Land Surveying / Geomatics Engineering / Geoinformatics / Civil Engineering / Marine Technology / Computer Programming or other related fields.

UTM Hydrographic Surveying Programme Activities



For further details, please contact us:

 Programme Manager
 UTM HYDRO I
 Sr Dr. Amr Hassan Md Din
 +6013-7975476 | amrhassan@utm.my

 Programme Manager
 UTM HYDRO II & UTM HYDRO III
 Sr Dr. Khairulnizam M. Idris
 +6019-7803036 | khairulnizam@utm.my

 Programme Manager
 Marine Geospatial and Cartography
 Sr Dr. Mohd Fard Mohd Aniff
 +6011-12234055 | mfaibn@utm.my

www.utm.my

innovative • entrepreneurial • global

In order to sustain the high professional standard and quality in learning, teaching and facilities provided, continuous assessment of the programme is carried out. For this reason, the students will fill in the Course Evaluation Questionnaire and Programme Evaluation Questionnaire after their complete this programme.

STEERING COMMITTEE FOR UTM HYDROGRAPHIC SURVEYING PROGRAMME

Chairman

Prof. Sr Dr. Mohd Razali bin Mahmud
Professor in Hydrography, UTM

Members from UTM

Assoc. Prof. Dr. Zulkepli Majid, Deputy Dean of Research, Innovation, Development and Alumni
Assoc. Prof. Dr. Sr Zulkarnaini Mat Amin, Director of Geoinformation
Sr Dr. Khairulnizam M. Idris
Sr Dr. Mohd Farid Mohd Ariff
Sr Dr. Ami Hassan Md Din

Members from National Hydrographic Centre (PHN)

First Admiral Najhan Md Said
Lt. Cdr. Ahmad Rizuan Hussin

STEERING COMMITTEE FOR UTM HYDROGRAPHIC SURVEYING PROGRAMME

Chairman

Prof. Sr Dr. Mohd Razali bin Mahmud
Professor in Hydrography, UTM

Members from JUPEM

Sr Shahril Azhari Jumari
Sr Wan Zulaini Abdul Razak

Members from PEJUTA

Dato' Sr Dr. Md Said @ Mohd Zaid Abdullah
Sr Shahrudin Musa
Sr Md Rodi Ismail
Sr Mat Yunus Jaafar

Secretary

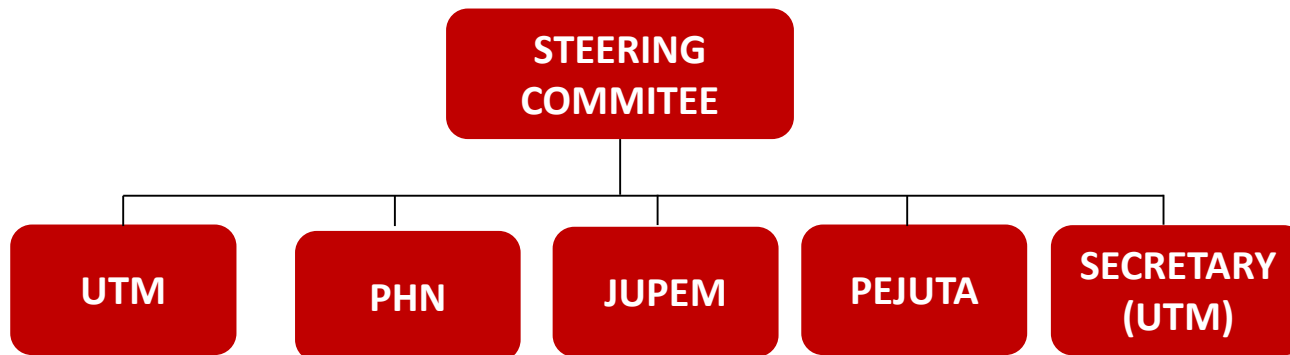
Datin Yasni Nurul Huda Mohd Yassin (UTM)

STEERING COMMITTEE

The Steering Committee FIG/IHO/ICA Hydrographic Programme was established to **review the overall and functional performance and direct remedial action to achieve present target.**

The Steering Committee also **reviews academic performance on a annual basic with decisions on action to be taken by the Programme Manager and extensive review in 3 years.**

STEERING COMMITTEE

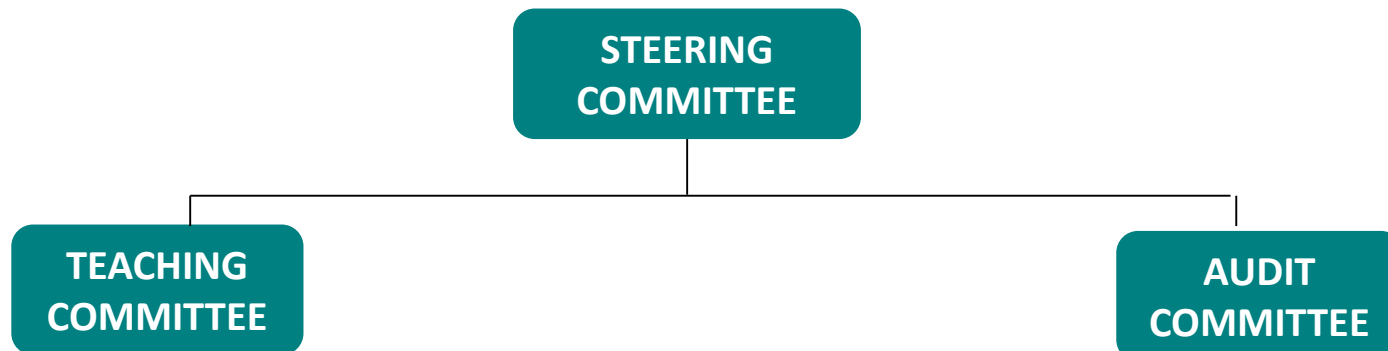


THE STEERING COMMITTEE



THE STEERING COMMITTEE FIG/IHO/ICA HYDROGRAPHIC PROGRAMME

SUB-COMMITTEE



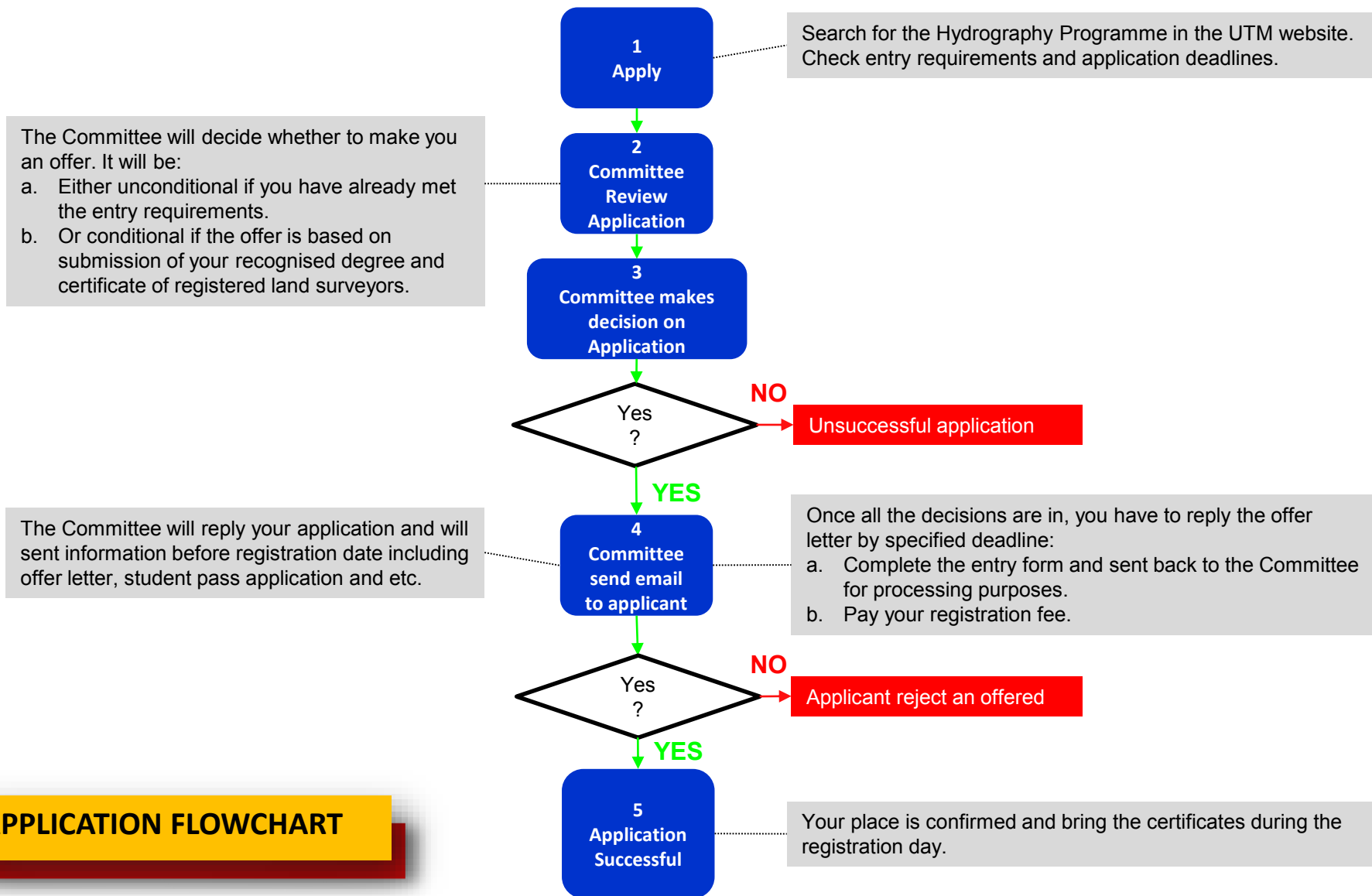
THE TEACHING COMMITTEE

To sustain the high professional teaching and quality of programme, UTM established the Teaching Committee under the Steering Committee to review and appoint the qualified instructors, and assessing the academic and professional hydrographic and cartographic programme.

AUDIT COMMITTEE

To sustain the high professional standard and quality of programme, UTM established the Audit Committee under the Steering Committee comprising of professional personnel with experiences in hydrographic matters to evaluate the quality of programme organised by UTM.

Lead by a representative from UTM Centre for Quality and Risk Management (QRiM)



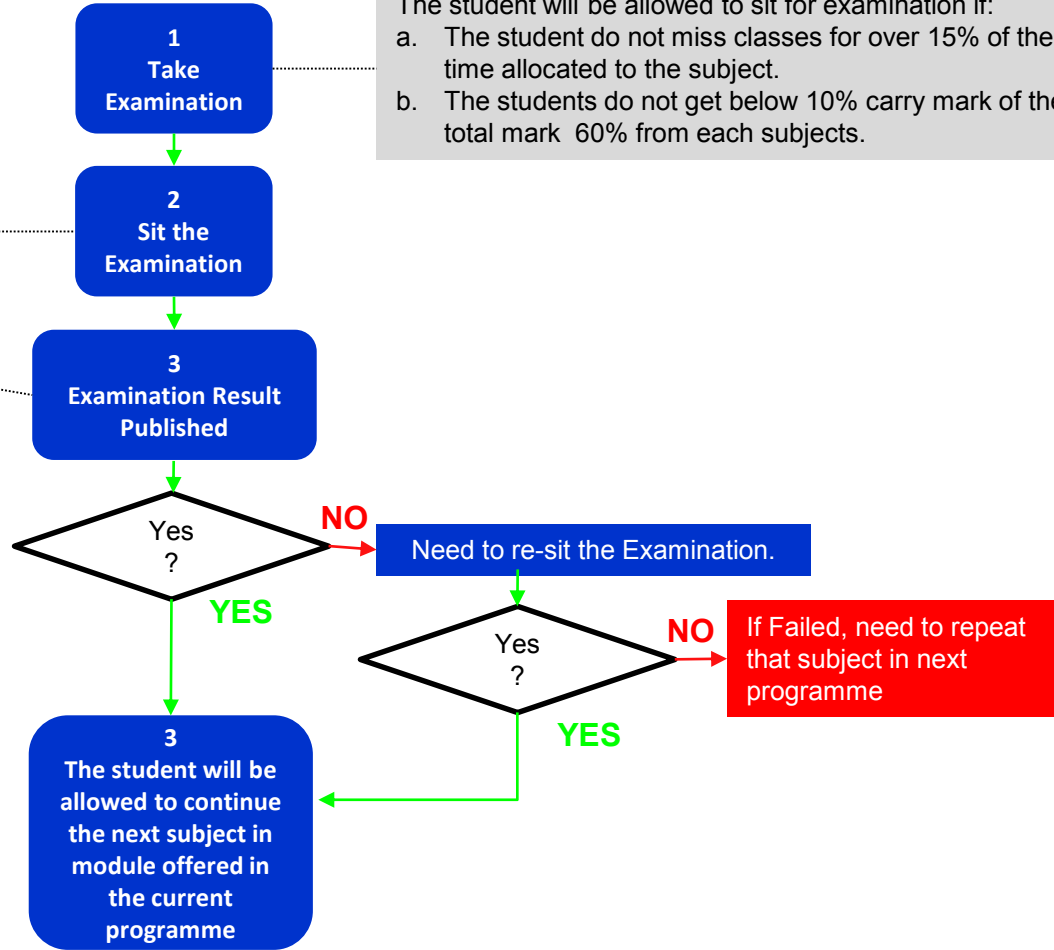
APPLICATION FLOWCHART

The student will sit for the examination after finished class for each subjects offered.

If the student passed the 50% of total mark (examination and carry mark), the student will be allowed to continue the next subject. If the student do not achieved the 50 % mark, they need to re-sit the examination.

The student will be allowed to sit for examination if:

- The student do not miss classes for over 15% of the total time allocated to the subject.
- The students do not get below 10% carry mark of the total mark 60% from each subjects.



EXAMINATION FLOWCHART

CONCLUSION

- To-date, a total of 295 graduates of Professional Hydrographic Programmes are produced by UTM (UTM HYDRO I, 178; UTM HYDRO II, 96; UTM HYDRO III, 17 and UTM CARTO I, 4)

CONCLUSION

- UTM HYDRO I, UTM HYDRO II, UTM HYDRO III and UTM CARTO I programmes provide the opportunity for a proper training and qualification in hydrography/cartography which previously could only be provided overseas.

CONCLUSION

- Universiti Teknologi Malaysia will strive to ensure all programmes of high quality.
- Support from the National Hydrographic Centre, Department of Survey and Mapping Malaysia, the Association of Authorised Land Surveyors Malaysia and the National Hydrographic Committee of Malaysia is of extreme importance for a successful implementation to the programmes.

CONCLUSION

- With the support from the surveying community in the country, UTM will continue to progress and become a centre for the development and dissemination of knowledge in hydrographic surveying in Malaysia and the South-East Asia region.

Thank you
